Best Practice Initiative
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Multidimensional Family Therapy (MDFT) for Adolescent Substance Abuse
Center for Treatment Research on Adolescent Drug Abuse, University of Miami School of Medicine (2002)

Project Accomplishments

Multidimensional family therapy (MDFT) has been recognized as one of the most promising interventions for adolescent drug abuse in a new generation of comprehensive, multicomponent, theoretically-derived and empirically-supported treatments (CSAT, 1999; NIDA, 1999; Drug Strategies, 2002; Waldron, 1997; Weinberg et al., 1998; Williams & Chang, 2000). MDFT has demonstrated efficacy in four randomized clinical trials, including three treatment studies (one of which was a multisite trial) and one prevention study. Investigators have also conducted a series of treatment development and process studies illuminating core change mechanisms of change.

Background

Multidimensional Family Therapy (MDFT) is an outpatient family-based drug abuse treatment for teenage substance abusers (Liddle, 1992; Liddle, 2002a, 2002b). MDFT has been applied in several geographically distinct settings with a range of populations, targeting ethnically diverse adolescents (White, African-American, and Hispanic) at risk for abuse and/or abusing substances and their families. The majority of families treated have been from disadvantaged inner-city communities.

As a developmentally- and ecologically-oriented treatment, MDFT takes into account the interlocking environmental and individual systems in which clinically referred teenagers reside. The approach is manualized (Liddle, 2002b), training materials and adherence scales have been developed, and we have demonstrated that the treatment can be taught to clinic therapists with a high degree of fidelity to the model (Hogue et al., 1996; Hogue et al., 1998). MDFT is being implemented in state-wide dissemination initiatives and investigators are examining the process of adapting and transporting the model into an existing day treatment drug program for adolescents (Liddle et al., 2002).

Goals

Targeted outcomes in MDFT include reducing the impact of negative factors as well as promoting protective processes in as many areas of the teen's life as possible Objectives for the adolescent include transformation of a drug using lifestyle into a developmentally normative lifestyle and improved functioning in several developmental domains, including positive peer relations, healthy identity formation, bonding to school and other pro social institutions, and autonomy within the parent-adolescent relationship. For the parent(s), intermediate objectives include: increasing parental commitment and preventing parental abdication; improved relationship and communication between parent and adolescent; and increased knowledge about parenting practices (e.g., limit-setting, monitoring, appropriate autonomy granting).

Core Components

From the perspective of MDFT, adolescent drug use is understood in terms of a network of influences (i.e., individual, family, peer, community). This multidimensional approach suggests that reductions in target symptoms and increases in prosocial target behaviors occur via multiple pathways, in differing contexts and through different mechanisms. The therapeutic process is thought of as retracking the adolescent's development in the multiple ecologies of his or her life. The therapy is phasically organized, and it relies on success in one phase of the therapy before moving on to the next. Knowledge of normal development and developmental psychopathology guides the overall therapeutic strategy and specific interventions.

The MDFT treatment format includes individual and family sessions, and sessions with various family and extra familial sessions. Sessions are held in the clinic, in the home, or with family members at the court, school or other relevant community locations. The therapist helps to organize treatment by introducing several generic themes. These are different for the parents (e.g., feeling abused and without ways to influence their child) and adolescents (e.g., feeling disconnected and angry with their parents). The therapist uses these themes of parent-child conflict as assessment tools and as a way to identify workable content in the sessions.

During individual sessions, the therapist and adolescent work on important developmental tasks such as decision-making and mastery to promote the skills needed to maintain the adolescent on a prosocial track. The teenager is helped to acquire skills in communicating his or her thoughts and feelings and developing skills to better deal with life stressors. Job skills and vocational training are also part of treatment. Parallel to these individual sessions with the adolescent is work with the parents on improving parenting behaviors. Parents are helped to examine their particular parenting style, to distinguish influence from control, and to accept that not everything can or should be changed in order that they have a developmentally appropriate positive influence on their child (Liddle et al, 1998).

The format of MDFT has been modified to suit the clinical needs of different clinical populations. A full course of MDFT ranges between 16 and 25 sessions over four to six months. Sessions may occur multiple times during the week in a variety of contexts including in-home, in-clinic, or by phone. The MDFT approach is organized according to five assessment and intervention modules: 1) Interventions with the Adolescent, 2) Interventions with the Parent, 3) Interventions to Change the Parent-Adolescent Interaction, 4) Interventions with Other Family Members, and 5) Interventions with Systems External to the Family.

Results

Four treatment efficacy studies have been conducted on MDFT and two more are nearing completion. In the first randomized controlled trial of MDFT conducted in the San Francisco-Oakland area, MDFT was compared with two well-established drug abuse treatments, multifamily educational intervention (MFEI) and adolescent group therapy (AGT). Participants in the study were 95 drug-using adolescents and their families. Assessments were administered at treatment intake and at one-year follow-up and consisted of 1) drug use, 2) problem behaviors, 3) school performance, and 4) family functioning. The general pattern of results indicated improvement among youth in all three treatments, with MDFT participants showing the largest and most stable gains on all outcomes (Liddle et al., 2001).

The second study was conducted in North Philadelphia comparing MDFT to individual cognitive-behavioral therapy (CBT) for adolescent drug abuse. Participants in the study were 224 drug-using adolescents and their families. Self-reported adolescent drug use and adolescent-reported and parent-reported externalizing and internalizing symptomatology were assessed at intake, termination, and again at 6 and 12 months following treatment termination. Both treatments produced a significant decrease in drug use, externalizing problems, and internalizing problems from intake to termination. Although we found no evidence to suggest that either treatment was superior to the other in influencing the amelioration of symptoms at termination, adolescents receiving MDFT continued to improve after termination while CBT youth did not (Liddle, 2002a).

In CSAT's Cannabis Youth Treatment study, the third controlled trial testing MDFT, the model fared well in terms of comparative efficacy as well as cost analyses (Dennis et al., in press). All five treatments studied in this multi-site trial were found to be more effective than current practice. Moreover, all of the CYT treatments cost less than both the mean and median cost reported by clinic directors of adolescent outpatient treatment after adjusting for inflation. Thus, these treatments all appear to be sustainable under current funding levels. MDFT delivered at two sites were able to replicate results described above. At the 6-month follow-up, youth who received MDFT at a rural clinic in Illinois reported a 49% reduction in drug use, and a 36% reduction was observed at an inner city Philadelphia clinic. Twelve-month outcomes indicated that these treatment gains were maintained. Cost benefit analyses indicate that MDFT had

significant intake to follow-up reductions in drug use consequences and the lowest comparative dollar cost of drug use consequences at 12 months.

Finally, preliminary results are available of a randomized trial comparing the clinical effectiveness and relative monetary benefits of MDFT vs. residential treatment for dually diagnosed adolescent substance abusers. Teens in both MDFT and residential treatment significantly reduced their drug use and externalizing symptoms between intake and discharge from treatment (approximately 6 to 8 months in both treatments). However, upon discharge from treatment, MDFT teens continued to *decrease* their drug use and problem behaviors up to the 12 month follow up, while youth in the residential condition showed an *increase* in both types of problems. Further, cost analyses reveal an almost 3:1 differential in the costs of the two treatment favoring MDFT ($384 per week vs. $1,138), suggesting that these more promising results can be obtained in MDFT at a fraction of the cost of residential treatment.

A prevention version of MDFT has been empirically tested in a randomized clinical trial with adolescents at high risk for alcohol and marijuana use and antisocial behavior. Adolescents in MDFT showed greater gains than community controls in terms of increased self-concept, family cohesion, increased bonding to school, and decreased antisocial behaviors by peers. Further, while controls showed increases in risk factors over the study, MDFT families reported strengthened family and school bonds and reduced peer delinquency.

Finally, process studies have focused on building the alliance with the adolescent, changing parenting behaviors in treating, resolving therapeutic impasses with families, and exploring culturally salient issues with African-American youth.

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